

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)
East North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	1188.2	1195.3	1230.5	1285.9	1262.6	1226.8	1200.9	1161.1	1155.7	1141.3	1120.9	1099.4	1082.7	1073.6
TDI Diesel ICE	6.2	3.7	4.2	4.3	6.4	6.2	5.9	5.6	5.8	6.0	6.2	6.4	6.5	7.0
Total Conventional	1194.4	1199.0	1234.7	1290.1	1269.0	1233.0	1206.8	1166.7	1161.5	1147.3	1127.1	1105.7	1089.3	1080.6
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	62.5	63.1	66.0	68.0	76.7	77.1	75.3	73.8	73.8	72.7	71.1	69.4	68.0	67.3
Ethanol ICE	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.8	1.0	1.2	1.1	1.1
Electric-Gasoline Hybrid	7.6	14.2	18.7	31.3	27.8	38.5	38.9	46.0	51.0	53.5	55.4	57.3	61.2	64.3
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	7.2	7.2	7.5	7.9	7.8	7.6	7.5	7.3	7.3	7.2	7.1	7.0	6.9	6.9
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	79.6	86.9	94.7	109.8	115.1	125.9	124.3	129.9	134.9	136.7	137.2	137.3	139.7	142.0
Percent Alternative Car Sales	6.25	6.76	7.12	7.85	8.31	9.26	9.34	10.01	10.40	10.65	10.85	11.05	11.37	11.61
Total New Car Sales	1274.0	1285.9	1329.4	1400.0	1384.1	1358.9	1331.1	1296.6	1296.3	1284.0	1264.2	1243.1	1229.0	1222.5
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	1098.2	1111.8	1057.1	940.4	938.2	946.1	979.4	1012.8	1017.6	1024.9	1026.0	1029.8	1021.6	1017.5
TDI Diesel ICE	53.1	49.6	43.3	43.2	59.4	62.6	66.5	69.7	73.9	76.6	79.1	83.1	84.5	90.7
Total Conventional	1151.3	1161.5	1100.3	983.6	997.6	1008.7	1045.9	1082.5	1091.5	1101.5	1105.1	1112.9	1106.1	1108.2

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Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	61.5	62.6	67.2	60.1	98.8	100.1	104.7	108.8	109.0	109.7	109.8	110.1	108.8	108.2
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	10.8	16.6	17.8	33.8	34.8	36.0	39.4	42.0	44.5	47.4	59.1	64.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.8	4.8	4.7	4.2	4.4	4.5	4.7	4.9	4.9	5.0	5.0	5.0	5.1	5.1
Liquefied Petroleum Gas ICE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	15.9	16.1	15.5	13.9	14.6	15.0	15.6	16.1	16.3	16.5	16.5	16.7	16.7	16.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	82.8	84.1	98.6	95.4	136.2	154.0	160.3	166.4	170.2	173.8	176.4	179.8	190.3	195.1
Percent Alternative Light Truck Sales	6.71	6.75	8.23	8.84	12.01	13.25	13.29	13.33	13.49	13.63	13.77	13.91	14.68	14.97
Total New Truck Sales	1234.1	1245.6	1199.0	1079.1	1133.8	1162.7	1206.1	1248.9	1261.7	1275.2	1281.6	1292.6	1296.4	1303.2
Percent Total Alternative Sales	6.48	6.76	7.65	8.28	9.98	11.10	11.22	11.64	11.93	12.13	12.32	12.50	13.07	13.34
EPACT Legislative Alternative Sales	41.23	41.61	40.87	38.58	39.77	40.25	41.06	41.79	42.10	42.31	42.29	42.37	42.34	42.45
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	2508.1	2531.4	2528.4	2479.1	2517.8	2521.6	2537.3	2545.5	2558.0	2559.2	2545.8	2535.7	2525.3	2525.8

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	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	1065.4	1059.0	1051.6	1047.3	1044.1	1042.2	1040.3	1037.6	1034.0	1032.1	1027.9	1022.6	1017.7	1013.5	-0.6%
TDI Diesel ICE	7.3	7.9	8.2	9.0	9.7	10.5	11.1	11.8	12.9	13.6	14.4	15.1	16.4	17.3	6.1%
Total Conventional	1072.7	1066.9	1059.8	1056.3	1053.8	1052.6	1051.4	1049.5	1046.9	1045.7	1042.3	1037.7	1034.2	1030.8	-0.6%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	66.6	66.1	65.5	65.1	64.9	64.8	64.7	64.6	64.3	64.3	64.1	63.8	63.5	63.3	0.0%
Ethanol ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.8%
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-0.2%
Electric-Diesel Hybrid	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	N/A
Electric-Gasoline Hybrid	67.4	71.1	74.6	77.7	80.9	84.3	87.8	91.3	94.9	98.7	102.4	106.2	110.1	114.3	8.3%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Compressed Natural Gas Bi-fuel	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	-0.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	-0.2%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	144.4	147.4	150.2	153.0	155.9	159.2	162.5	165.9	169.2	173.0	176.4	179.8	183.5	187.4	3.0%
Percent Alternative Car Sales	11.86	12.14	12.41	12.65	12.89	13.13	13.39	13.65	13.91	14.19	14.48	14.77	15.07	15.38	3.2%
Total New Car Sales	1217.1	1214.3	1210.0	1209.3	1209.7	1211.8	1213.9	1215.4	1216.1	1218.7	1218.8	1217.5	1217.6	1218.2	-0.2%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	1022.5	1026.1	1027.2	1021.5	1024.2	1026.3	1032.0	1035.9	1034.7	1039.4	1043.1	1042.2	1036.6	1035.7	-0.3%
TDI Diesel ICE	95.8	103.9	109.0	118.4	126.1	135.4	142.1	151.2	164.5	172.5	180.6	188.4	204.6	213.2	5.8%
Total Conventional	1118.3	1130.0	1136.2	1139.9	1150.3	1161.7	1174.2	1187.1	1199.2	1211.8	1223.7	1230.6	1241.3	1249.0	0.3%

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	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	108.7	109.2	109.3	108.7	109.1	109.4	110.1	110.8	111.0	111.8	112.4	112.5	112.1	112.2	2.3%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N/A
Electric-Gasoline Hybrid	67.6	71.5	75.2	79.2	83.2	87.5	92.1	96.9	101.7	107.0	112.5	117.7	122.9	128.6	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	3.6%
Compressed Natural Gas Bi-fuel	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.9	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0%
Liquefied Petroleum Gas Bi-fuel	17.0	17.2	17.3	17.4	17.6	17.8	18.1	18.3	18.5	18.8	19.0	19.2	19.4	19.6	0.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	199.3	204.0	207.9	211.6	216.3	221.1	226.8	232.6	237.8	244.2	250.7	256.2	261.3	267.3	4.5%
Percent Alternative Light Truck Sales	15.13	15.29	15.47	15.66	15.83	15.99	16.19	16.38	16.55	16.77	17.00	17.23	17.39	17.63	3.8%
Total New Truck Sales	1317.7	1333.9	1344.1	1351.5	1366.6	1382.8	1400.9	1419.7	1437.0	1456.0	1474.4	1486.7	1502.5	1516.2	0.8%
Percent Total Alternative Sales	13.56	13.79	14.02	14.24	14.45	14.66	14.89	15.12	15.34	15.60	15.86	16.12	16.35	16.63	3.5%
EPACT Legislative Alternative Sales	42.75	43.12	43.33	43.50	43.87	44.28	44.74	45.21	45.64	46.12	46.57	46.86	47.24	47.58	0.5%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	2534.7	2548.2	2554.1	2560.8	2576.3	2594.6	2614.8	2635.1	2653.0	2674.7	2693.2	2704.3	2720.1	2734.4	0.3%

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)
East North Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.